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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/965,536  | 09/26/2001  | John N. Feder        | D0041 NP            | 3734             |
| 23914   | 7590        | 09/26/2003           | EXAMINER            |                  |
| STEPHEN B. DAVIS<br>BRISTOL-MYERS SQUIBB COMPANY<br>PATENT DEPARTMENT<br>P O BOX 4000<br>PRINCETON, NJ 08543-4000 |             |                      | TURNER, SHARON L    |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 1647                 |                     |                  |
| DATE MAILED: 09/26/2003   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|------------------------------|------------------------|---------------------|
|                              | 09/965,536             | FEDER ET AL.        |
| Examiner                     | Art Unit               |                     |
| Sharon L. Turner             | 1647                   |                     |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 07 February 2002 .

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-34 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) \_\_\_\_\_ is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) 1-34 are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ . 6)  Other: \_\_\_\_\_ .

**Election/Restriction**

1. Claims 1-34 are pending.

**Improper Markush**

2. Prior to setting forth the restriction requirement, it is pointed out that applicants have presented instant claims in improper Markush format, see *Ex parte Markush*, 1925 C.D. 126, *In re Weber*, 198 USPQ 334 and MPEP 803.02 and 806.04. The claims are improperly set forth as the genus claims encompassing multiple products, as identified and claimed, fail to share the characteristics of a genus, i.e., a common utility and a substantial structural feature essential to the disclosed utility. Alternatively, the claims define multiple structurally distinct compounds capable of different use, with different modes of operation, different function and different effects. A reference against one of the claimed components or methods would not be a reference against the other. Therefore, the restriction will be set forth for each of the various groups, irrespective of the improper format of the claims, because the claims define inventions which are not proper species.

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-10, 14-15, 27 in part drawn to nucleic acids of SEQ ID NO:1 and encoding SEQ ID NO:2 classified for example in class 536, subclass 23.1.
  - II. Claims 1-10, 14-15, 27 in part drawn to nucleic acids of SEQ ID NO:5 and encoding SEQ ID NO:6, classified for example in class 536, subclass 23.1.
  - III. Claims 11-12, 16, 28 in part drawn to a polypeptide of SEQ ID NO: 2, classified for example in class 530, subclass 350.

IV. Claims 11-12, 16, 28 in part drawn to a polypeptide of SEQ ID NO: 6, classified for example in class 530, subclass 350.

V. Claim 13 in part drawn to an antibody to SEQ ID NO:2, classified for example in class 530, subclass 387.1.

VI. Claim 13 in part drawn to an antibody to SEQ ID NO:6, classified for example in class 530, subclass 387.1.

VII. Claim 17, 26 drawn in part to a method of preventing, treating or ameliorating comprising administration of the polypeptide of SEQ ID NO:2, classified for example in class 514, subclass 2.

VIII. Claim 17, 26 drawn in part to a method of preventing, treating or ameliorating comprising administration of the polypeptide of SEQ ID NO:6, classified for example in class 514, subclass 2.

IX. Claim 17 drawn in part to a method of preventing, treating or ameliorating comprising administration of the polynucleotide of SEQ ID NO:1, classified for example in class 514, subclass 44.

X. Claim 17 drawn in part to a method of preventing, treating or ameliorating comprising administration of the polynucleotide of SEQ ID NO:5, classified for example in class 514, subclass 44.

XI. Claim 18 in part drawn to a method of diagnosing with the nucleic acid of SEQ ID NO:1, classified for example in class 435, subclass 91.2.

XII. Claim 18 in part drawn to a method of diagnosing with the nucleic acid of SEQ ID NO:5, classified for example in class 435, subclass 91.2.

XIII. Claim 19 in part drawn to a method of diagnosing with a peptide, classified for example in class 435, subclass 7.1.

XIV. Claims 19 in part drawn to a method of diagnosing with a peptide, classified for example in class 435, subclass 7.1.

XV. Claim 21 and 24 in part drawn to a method of identifying an activity in a biological assay comprising expressing SEQ ID NO:2, classified for example in class 436, subclass 536.

XVI. Claim 21 and 24 in part drawn to a method of identifying an activity in a biological assay comprising expressing SEQ ID NO:6, classified for example in class 436, subclass 536.

XVII. Claim 22 and 24-25 in part drawn to a method for identifying a binding partner of SEQ ID NO:2, classified for example in class 435, subclass 6.

XVIII. Claim 22 and 24-25 in part drawn to a method for identifying a binding partner of SEQ ID NO:6, classified for example in class 435, subclass 6.

XIX. Claim 23 and 24 in part drawn to a method of identifying a compound that modulates the biological activity of HGPRBMY5 with host cell containing SEQ ID NO:1, classified for example in class 436, subclass 536.

XX. Claim 23 and 24 in part drawn to a method of identifying a compound that modulates the biological activity of HGPRBMY5 with host cell containing SEQ ID NO:5, classified for example in class 436, subclass 536.

XXI. Claim 23 and 24 in part drawn to a method of identifying a compound that modulates the biological activity of GPCR with host cell containing SEQ ID NO:1,

classified for example in class 436, subclass 536.

XXII. Claim 23 and 24 in part drawn to a method of identifying a compound that modulates the biological activity of GPCR with host cell containing SEQ ID NO:1, classified for example in class 436, subclass 536.

XXIII. Claim 29 in part drawn to a cell comprising NFAT/CRE and the polypeptide of SEQ ID NO:2, classified for example in 435, subclass 325.

XXIV. Claim 29 in part drawn to a cell comprising NFAT/CRE and the polypeptide of SEQ ID NO:6, classified for example in 435, subclass 325.

XXV. Claim 30 in part drawn to a cell comprising NFAT G alpha 15 and the polypeptide of SEQ ID NO:2, classified for example in 435, subclass 325.

XXVI. Claim 30 in part drawn to a cell comprising NFAT G alpha 15 and the polypeptide of SEQ ID NO:6, classified for example in 435, subclass 325.

XXVII. Claim 31-34 in part drawn to a method of screening with a cell comprising NFAT/CRE and the polypeptide of SEQ ID NO:2, classified for example in 435, subclass 325.

XXVIII. Claim 31-34 in part drawn to a method of screening with a cell comprising NFAT/CRE and the polypeptide of SEQ ID NO:6, classified for example in 435, subclass 325.

XXIX. Claim 31-34 in part drawn to a method of screening with a cell comprising NFAT G alpha 15 and the polypeptide of SEQ ID NO:2, classified for example in 435, subclass 325.

XXX. Claim 31-34 in part drawn to a method of screening with a cell comprising NFAT

G alpha 15 and the polypeptide of SEQ ID NO:6, classified for example in 435, subclass 325.

4. The inventions are distinct, each from the other because of the following reasons:
5. Inventions I-VI and XXIII-XXVI are related as products. The products are distinct each from the other as the products are comprised of divergent structure, exhibit different effects and functions and are alternatively comprised of, for example, nucleic acids, peptides, inorganic compounds and cells.
6. Inventions VII-XXII and XXVII-XXX are related as processes. The processes are distinct each from the other as the processes differ in reagents, steps, functions and effects.
7. Inventions I-VI, XXIII-XXVI and VII-XXII, XXVII-XXX are related as products and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the processes for using the nucleic acids, peptides, antibodies and compounds can be practiced with alternative nucleic acids, peptides antibodies and compounds and the products as claimed can be used alternatively in a method of treatment, a method of making antibodies, a method of screening compounds, a method of diagnosis and in methods for detecting compositions.
8. The inventions are distinct, each from the other because of the following reasons:
9. Although there are no provisions under the section for "Relationship of

Inventions" in MPEP 806.05 for inventive groups that are directed to different products, restriction is deemed to be proper because the products indicated constitute patentably distinct inventions for the following reasons. Each of the products has a unique structural feature which requires a unique search of the prior art. The inventions indicated differ in structure and function as they are composed of divergent nucleic and amino acids and are differentially able to hybridize, bind or mediate biological functions. A reference to one element would not constitute a reference to another. In addition, searching all of the molecules in a single patent application would provide an undue search burden on the examiner and the USPTO's resources because the indicated searches are not co-extensive.

10. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

11. Because these inventions are distinct for the reasons given above and the search required for any Group is not required for any other Group, restriction for examination purposes as indicated is proper.

12. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

14. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon L. Turner, Ph.D. whose telephone number is (703) 308-0056. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (703) 308-4623.



Sharon L. Turner, Ph.D.  
September 25, 2003